

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF THE CLAIMS:

Claim 1 (Canceled).

Claim 2 (Currently Amended) A ~~The semiconductor resistor device as claimed in Claim 1,~~
comprising a plurality of alternating conductive film and insulative film layers, at least two of the
conductive film layers being electrically connected in parallel to provide for high current flow
through the resistor device at RF frequencies with increased temperature and mechanical
stability, wherein said plurality of alternating conductive film and insulative film layers are in a
planar orientation, said insulative film layers serving to limit current flow in a direction
perpendicular to an insulator film surface.

Claim 3 (Currently Amended) A ~~The semiconductor resistor device as claimed in Claim 1,~~
comprising a plurality of alternating conductive film and insulative film layers, at least two of the
conductive film layers being electrically connected in parallel to provide for high current flow
through the resistor device at RF frequencies with increased temperature and mechanical
stability, wherein said plurality of conductive film and insulative film layers are in a trough
orientation.

Claim 4 (Currently Amended) The semiconductor resistor device as claimed in Claim [[1]] 2,
wherein each said conducting film layer comprises a metal material selected from the group
consisting of Ta, TaN, Ti, TiN, W, and WN.

Claim 5 (Currently Amended) The semiconductor resistor device as claimed in Claim [[1]] 2,
wherein a conducting film layer includes a resistive material having a temperature coefficient of
resistance (TCR) value, wherein at least two of the plurality of conductive film layers include

materials having different TCR values to provide a desired effective temperature coefficient of resistance.

Claim 6 (Original) The semiconductor resistor device as claimed in Claim 5, wherein a desired effective temperature coefficient of resistance is substantially 0 ppm/°C.

Claim 7 (Original) A high current resistor device comprising a plurality of alternating refractory metal films of high sheet resistance and insulator film layers, wherein insulator films provide vertical self-ballasting, and said metal film layers exhibit a lateral self-ballasting effect created by the high resistance of the refractory metal.

Claim 8 (Original) The high current resistor device as claimed in Claim 7, wherein the refractory metal film layers reduces skin effect at high frequencies and results in a self-ballasting effect.

Claim 9 (Original) The high current resistor device as claimed in Claim 7, wherein said internal lateral and vertical self-ballasting provides more uniform current flow and reduces thermal stress, thus, increased current density and high peak temperatures are obtainable.

Claim 10 (Original) The high current resistor device as claimed in Claim 7, wherein said metal film layers includes materials having different TCR values to provide a desired effective temperature coefficient of resistance.

Claim 11 (Original) The high current resistor device as claimed in Claim 7, wherein said plurality of alternating refractory metal film layers of high sheet resistance and insulator film layers are configured as one of a planar multi-stack structure or trough structure.

Claim 12 (Original) The high current resistor device as claimed in Claim 11, further comprising independently connecting different metal film layers to customize a resistance value.

Claims 13-30 (canceled)

Claim 31 (New) The semiconductor resistor device as claimed in Claim 3, wherein each said conducting film layer comprises a metal material selected from the group consisting of Ta, TaN, Ti, TiN, W, and WN.

Claim 32 (New) The semiconductor resistor device as claimed in Claim 3, wherein a conducting film layer includes a resistive material having a temperature coefficient of resistance (TCR) value, wherein at least two of the plurality of conductive film layers include materials having different TCR values to provide a desired effective temperature coefficient of resistance.

Claim 33 (New) The semiconductor resistor device as claimed in Claim 32, wherein a desired effective temperature coefficient of resistance is substantially 0 ppm/°C.